## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (previously presented) A process for producing and/or repairing very fine tips made of a photostructurable material on a carrier, characterized in that

the carrier is positioned on a first side of an exposure mask whose exposure section correlates to the tip to be produced or repaired,

the photostructurable material is applied onto the first side of the exposure mask and/or the carrier,

an exposure of the photostructurable material occurs via the exposure mask from a second side opposite the first side,

the exposed photostructurable material is hardened and the unexposed material removed, and

the carrier with the tip and the exposure mask are separated from one another.

- 2. (previously presented) The process according to claim 1, characterized in that the exposure occurs in a directed manner in a direction diagonal or inclined towards the tip.
- 3. (original) The process according to claim 2, characterized in that the exposure occurs at an angle of approximately 30° to a perpendicular line in relation to the exposure mask and/or to the surface of the carrier.
- 4. (original) The process according to claim 1, characterized in that the tip to be produced or repaired is positioned on top of the exposure mask.
- 5. (previously presented) The process according to claim 1, characterized in that prior to the positioning of the carrier a small amount of the photostructurable material is applied onto the exposure mask so that the carrier adheres to the mask.

- 6. (original) The process according to claim 1, characterized in that a separation layer is provided for a facilitated separation of the carrier having the tip from the exposure mask.
- 7. (previously presented) The process according to claim 1, characterized in that SU-8 is used as a structurable material and that a spin coating is used for its application.
- 8. (previously presented) The process according to claim 1, characterized in that the exposure mask is made from quartz and the exposure section provides the tip with a radius of less than 1 μm.
- 9. (original) The process according claim 1, characterized in that the shape and section of the exposure mask and/or the exposure angle are selected such that a tip develops having a predetermined radius and/or edge angle.
- 10. (previously presented) A process for producing and/or repairing very fine tips made of a photostructurable material on a carrier, comprising:

providing a multitude of carriers positioned on a wafer in an undivided manner, arranging an exposure mask provided with a multitude of exposure sections positioned in correspondence with the multitude of carriers so that the carriers are positioned on a first side of the exposure mask,

applying said photostructurable material onto the first side of said exposure mask and/or said carriers.

conducting a simultaneous, inclined or diagonal exposure of all said provided carriers on said wafer from a second side, opposite the first side, of said exposure mask, hardening said exposed photostructurable material and removing any unexposed photostructurable material to form said fine tips, and

separating said exposure mask from the wafer.

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- 11. (currently amended) A probe for use in a scanning probe microscopy microscope, comprising a carrier and a tip of a hardened photosensitive resist produced and/or mounted laterally at or on a said carrier and offset from the center of said carrier, the latter forming the cantilever of a said scanning probe microscope.
- 12. (previously presented) The probe according to claim 11, wherein the tip consists of photosensitive resist and is fabricated by a process for making photoresist etch masks in the production of semiconductors.
- 13. (currently amended) Use of a tip produced according to claim 1 in a A scanning probe microscope comprising the step of examining a, in particular for the examination of so-called soft specimen and/or in a vacuum or at low pressure, comprising a probe having a cantilever and a tip of a hardened photosensitive resist produced and/or mounted laterally at or on said cantilever and offset from the center of said cantilever.
- 14. (cancelled)
- 15. (previously presented) The process according to claim 8, characterized in that the exposure mask is made from quartz and the exposure section provides the tip with a radius of approximately 0.7 μm.
- 16. (previously presented) The probe according to claim 11, wherein the carrier comprises or is made of a semiconductor or quartz material.